

Figure 1

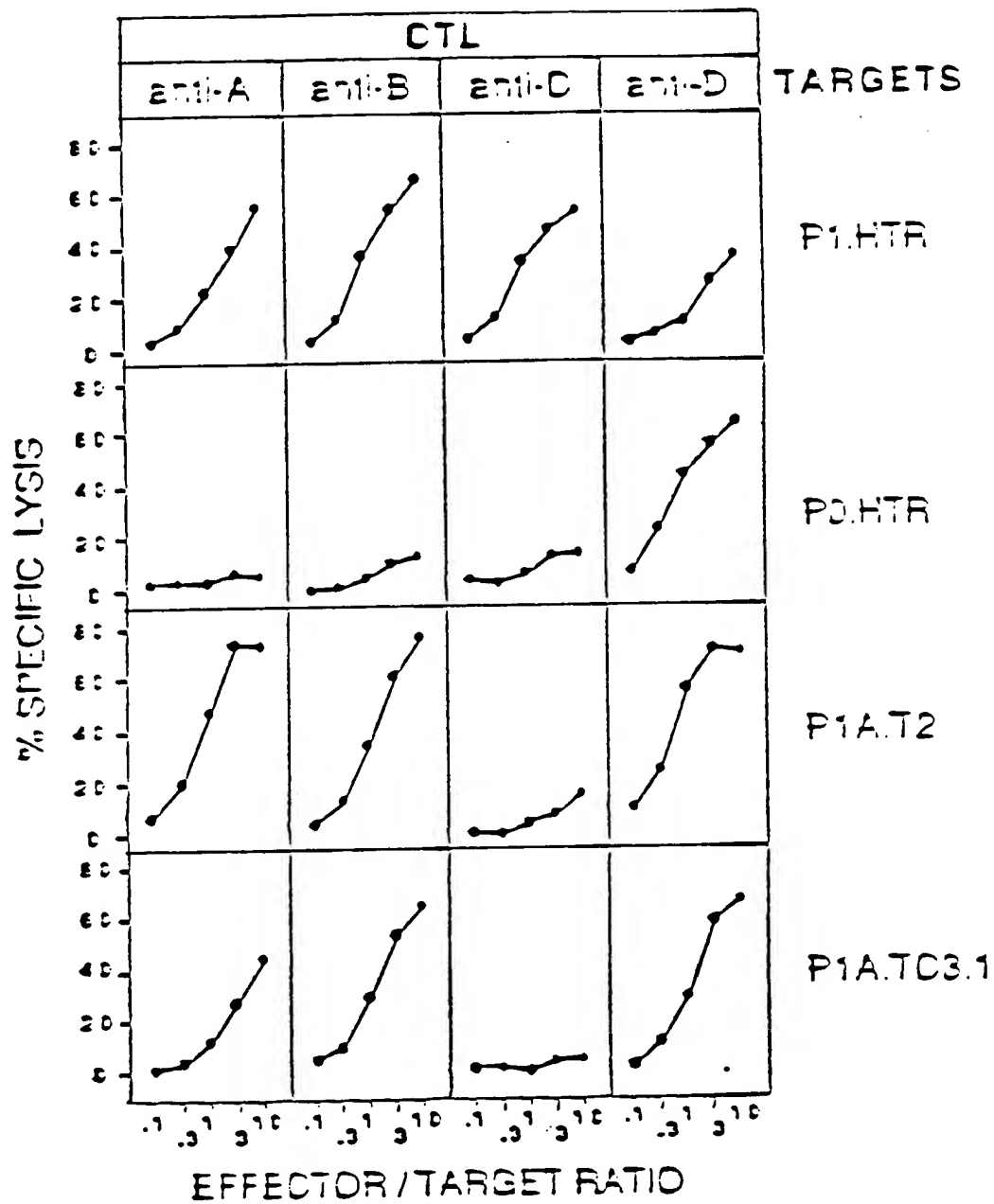
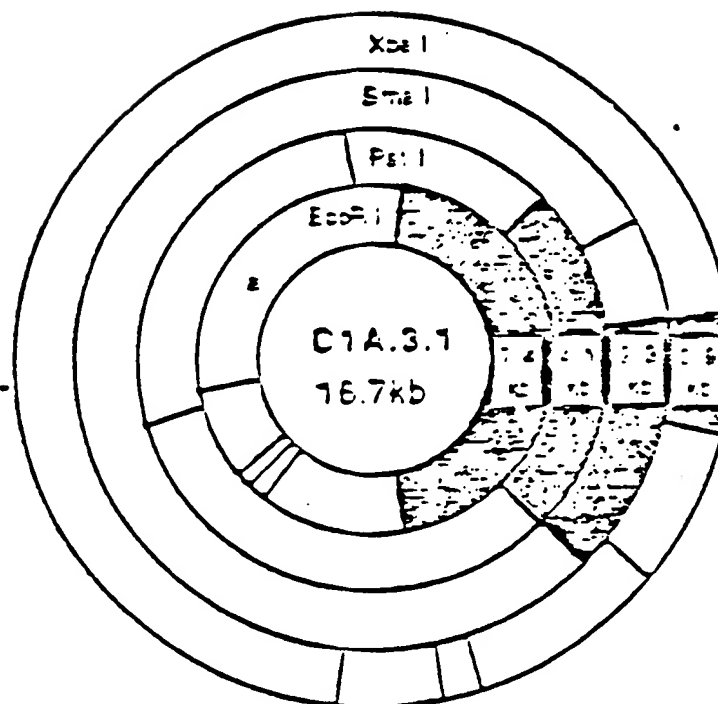


Figure 2



### Transfection of restriction fragments

No. of clones expressing P615A  
/ no. of HmB<sup>+</sup> clones

4.1 kb Pst I - Pst I	2/15
2.3 kb Sma I - Pst I	18/98
0.9 kb Sma I - Xba I	22/98

Figure 3

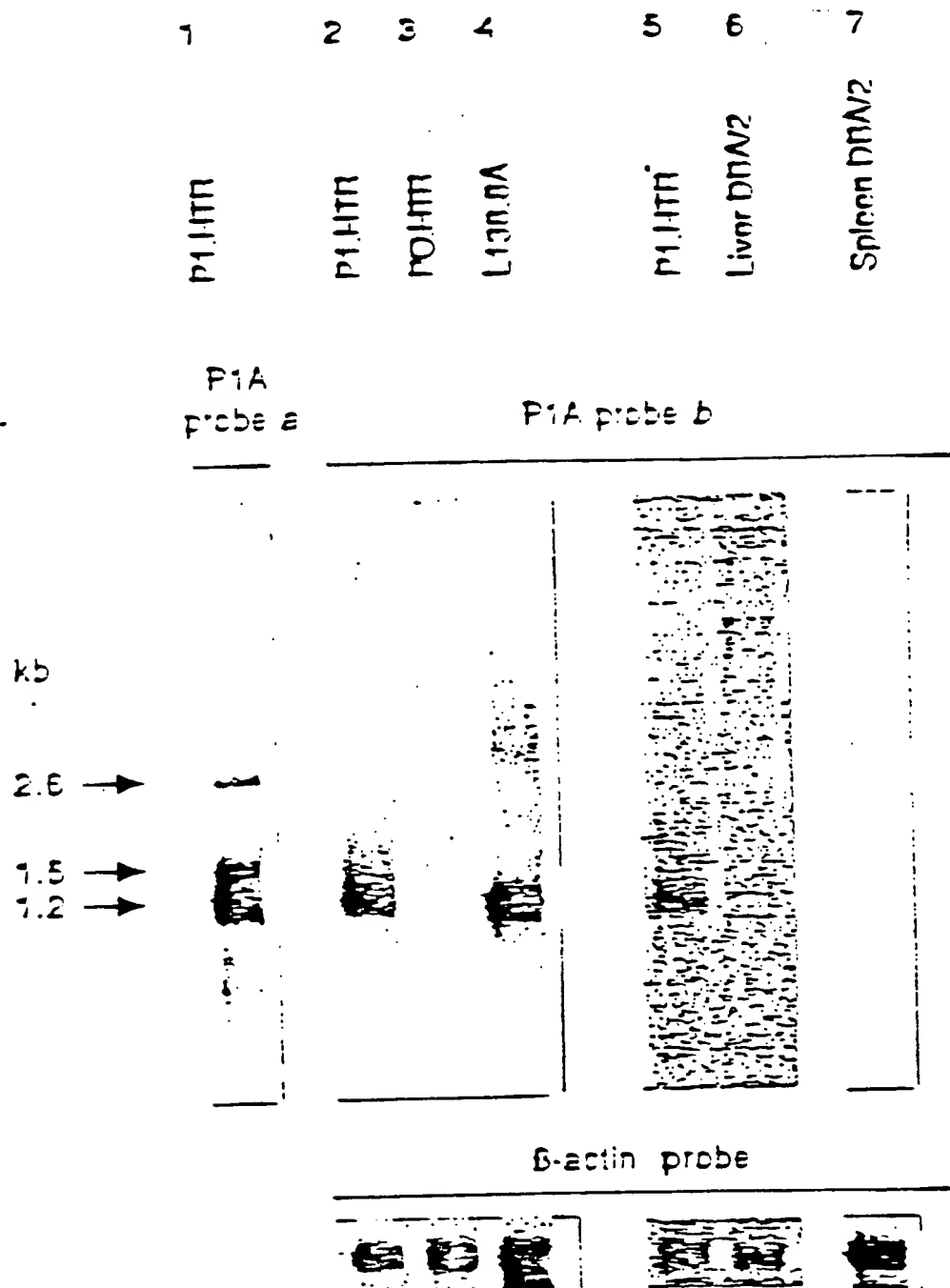


Figure 4

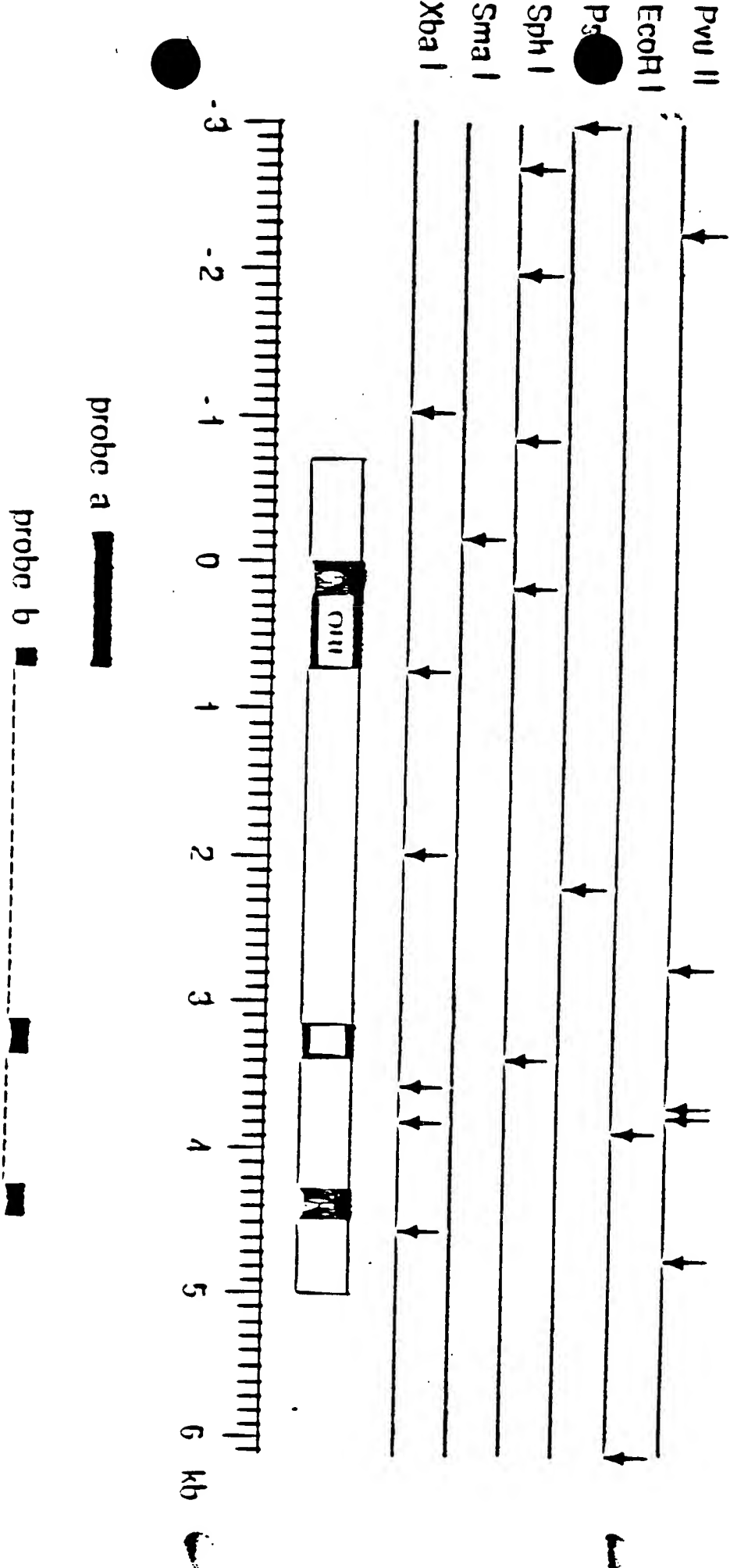


Figure 5

ACCACAGGAG AATGALLAGA ACCCGGGACT CCCAAGACG CTAGATGTGT GAAGATCCTG ATCACTCATT -120  
GGGTGTCTGA GTTCTGGGAT ATTCAATCCCT CAGCCAATGA GCTTACTGTT CTCGTGGGGG GTTTGTGAGC -50  
CTTGGGTAGG AAGTTTTGCA AGTTCCGGCT ACAGCTCTAG CTTGTGAATT TGTACCCCTT CACGTAAAA 19  
AGTAGTCCAG AGTTTACTAC ACCCTCCCTC CCCCCCTCCA CCTCGTGCTG TGCTGAGTTI AGAAGTCTTC 89  
CTTATAGAAG TCTTCCGTAT AGAATCTTC CGGAGGAAGG AGGGAGGACC CCCCCCTTT GCTCTCCAG 159  
CATGCATTGT GTCACGGCCA TTGCACTGAG CTGGTCGAAG AASTAAGCCG CTAGCTTGGG ACTCTACTCT 229  
TATCTTAACT TAGCTCGGCT TCCTGCTGGT ACCCTTTGTG CC 271

FIGURE 6a

ATG TCT GAT AAC AAG AAA CCA GAC AAA GCC CAC AGT GGC TCA GGT GGT GAC GGT GAT GGG 59  
 Met Ser Asp Asn Lys Lys Pro Asp Lys Ala His Ser Gly Ser Gly Gly Asp Gly Asp Gly  
 AAT AGG TGC AAT TTA TTG CAC CGG TAC TCC CTG GAA GAA ATT CTG CCT TAT CTA GGG TGG 118  
 Asn Arg Cys Asn Leu Leu His Arg Tyr Ser Leu Glu Glu Ile Leu Pro Tyr Leu Gly Trp  
 CTG GTC TTC GCT GTT GTC ACA ACA AGT TTT CTG GCG CTC CAG ATG TTC ATA GAC GCC CTT 177  
 Leu Val Phe Ala Val Val Thr Thr Ser Phe Leu Ala Leu Gln Met Phe Ile Asp Ala Leu  
 TAT GAG GAG CAG TAT GAA AGG GAT GTG GCC TGG ATA GCC AGG CAA AGC AAG CGC ATG TCC 236  
 Tyr Glu Glu Gln Tyr Glu Arg Asp Val Ala Trp Ile Ala Arg Gln Ser Lys Arg Met Ser  
 TCT GTC GAT GAG GAT GAA GAC GAT GAG GAT GAT GAG GAT GAC TAC TAC GAC GAC GAG GAC 295  
 Ser Val Asp Glu Asp Glu Asp Asp Glu Asp Asp Glu Asp Asp Tyr Tyr Asp Asp Glu Asp  
 GAC GAC GAC GAT GCC TTC TAT GAT GAT GAG GAT GAT GAG GAA GAA TTT GAG AAC CTG 354  
 Asp Asp Asp Asp Ala Phe Tyr Asp Asp Glu Asp Asp Glu Glu Glu Glu Leu Glu Asn Leu  
 ATG GAT GAT GAA TCA GAA GAT GAG GCC GAA GAA GAG ATG AGC GTG GAA ATG GGT GCC GGA 413  
 Met Asp Asp Glu Ser Glu Asp Glu Ala Glu Glu Glu Met Ser Val Glu Met Gly Ala Gly  
 GCT GAG GAA ATG GGT GCT GGC GCT AAC TGT GCC TGT GTT CCT GGC CAT CAT TTA AGG AAG 472  
 Ala Glu Glu Met Gly Ala Gly Ala Asn Cys Ala Cys Val Pro Gly His His Leu Arg Lys  
 AAT GAA GTG AAG TGT AGG ATG ATT TAT TTC TTC CAC GAC CCT AAT TTC CTG GTG TCT ATA 531  
 Asn Glu Val Lys Cys Arg Met Ile Tyr Phe Phe His Asp Pro Asn Phe Leu Val Ser Ile  
 CCA GTG AAC CCT AAG GAA CAA ATG GAG TGT AGG TGT GAA AAT GCT GAT GAA GAG GTT GCA 590  
 Pro Val Asn Pro Lys Glu Gln Met Glu Cys Arg Cys Glu Asn Ala Asp Glu Glu Val Ala  
 ATG GAA GAG GAA GAA GAA GAA GAG GAG GAG GAG GAG GAA GAG GAA ATG GGA AAC CCG GAT 649  
 Met Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Met Gly Asn Pro Asp  
 GGC TTC TCA CCT TAG  
 Gly Phe Ser Pro Amb

FIGURE 6b

GCATGCACTT GCAAGGCCA GAAGAAAGAA ATGACAGCG GAGAAAGTGG TTGTTTTTTT 60  
TTCCCTTCA TTAATTTCT AGTTTTAGT AATCCAGAA ATTTGATTT GTTCTAAAGT 120  
TCATTATGCA AAGATGTCAC CAACAGACTT CTGACTGCAT GGTGAACCTT CATATGATAC 180  
ATAGGATTAC ACTTGACCT GTTAAATAA AAGTTTGAC TTGCATAC 228

FIGURE 6c



cDNA Sequence of gene P2A  
 Content of A5011 2110 : cDNA (cf: Figure 6, parts a, b & c)

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ACGACAGGAG AATGAAAAAG ACCCGGGAGT CCGAAAGATG CTAGATGTGT
GAAGATCCCG ATGATCCAGT GGTGTGTCTA GTTGTGTGAT ATTGATCCCG
CAGCCATGTA GTTACTGTTT CTGTTGGGGG GTTGTGTGAT GTTGGGTAGG
AAGTTTTTGA AGTTGGGGCT ACAGGTGTAG GTTGTGTGAT TGTACCGTTT
CACTTAATAA AGTAGTCCAG AGTTTATGAG ACCGTGCGTC CCGGTTCCCA
CGTGGTGGTG TGTGAGTTT AAGATGTTT GTTATAGAG TGTTCGGTAT
ACAACTGTTT CCGAGGAGAG AGGAGGAGG CCGCGCGCTT GTTGTGTGAG
CATGATTTGT GTCAAGGCTA TTGACTGAG GTTGTGTGAG AAGTAAGGCG
CTAGCTTGGG AGTCTACTGT CATTTTAAGT TAGGTGGGCT TCGGTGTGTG
AAGCTTTGTG CC
ATG TGT GAT AAC AAG AAA CCA GAT AAA GGT CAC AGT GGG TCA
GGT GGT GAC GGT GAT GGG AAT AGG TGC AAT TCA TTG CAC CCG
CAC TGC CTG CAA GAA ATT CTG CCG TAT CTA GGG TGG CTG CTC
TTC GGT GTT GTC ACA ACA AAT TTT CTG GCG CTC CAC ATG TTC
ATA CAC GCG CTT TAT GAG GAG CAG TAT GAA AGG GAT CTG CCG
TGG ATA GCG AGG CAA AGC AAG CCG ATG TCC TGT CTC GAT CAG
GAT GAA CAC GAT GAC GAT GAT GAG GAT GAC TAC TAC GAC GAC
GAG GAC GAC GAC GAC GAT GCG TTC TAT GAT GAT GAG GAT GAT
GAG GAA GAA GAA TGG GAG AAC CTG ATG GAT GAT GAA TCA GAA
GAT GAG GGT GAA GAA GAG ATG AAT GTG GAA ATG GGT CCG CGA
GGT CAC GAA ATG GGT GGT GGT AAT TGT GCG TGT GTT CCG
GGC CAT CAT TTA AGG AAG AAT GAA GTG AAG TGT AGG ATG AAT
TAT TTC TTC CAC CAC CCG AAT TTC CTG CTC TGT ATA CCA GTG
AAC CCG AAG GAA CAA ATG GAG TGT AGG CCG GAA AAT GGT GAT
GAA GAG GTT CCA ATG GAA GAG CAA GAA GAA GAG GAG GAG
GAG GAG GAA GAG GAA ATG GGA AAC CCG GAT GCG TTC TCA CCG
TAG
GGATCCAGCTT GCAAGGCTTA GAAGAAAGAA ATGACACAGG GAAGAAAGTG
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ATTGATTTT GTTCTAAAGT TCATTATGAA AAGATGTCAG CAACAGACTT
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CTTAATAATA AAGTTTTGAC TTGATAC

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Figure 6d

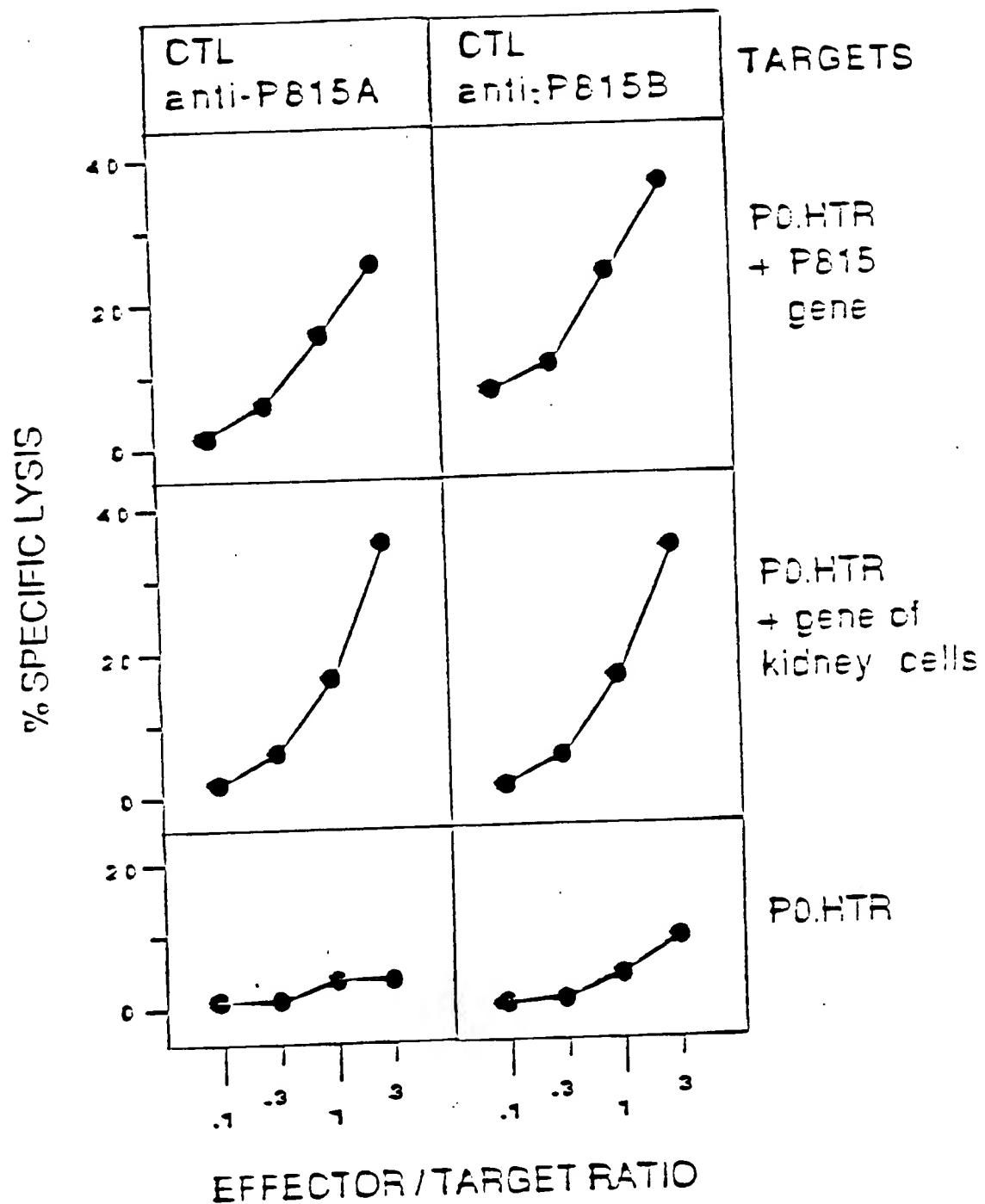


Figure 7

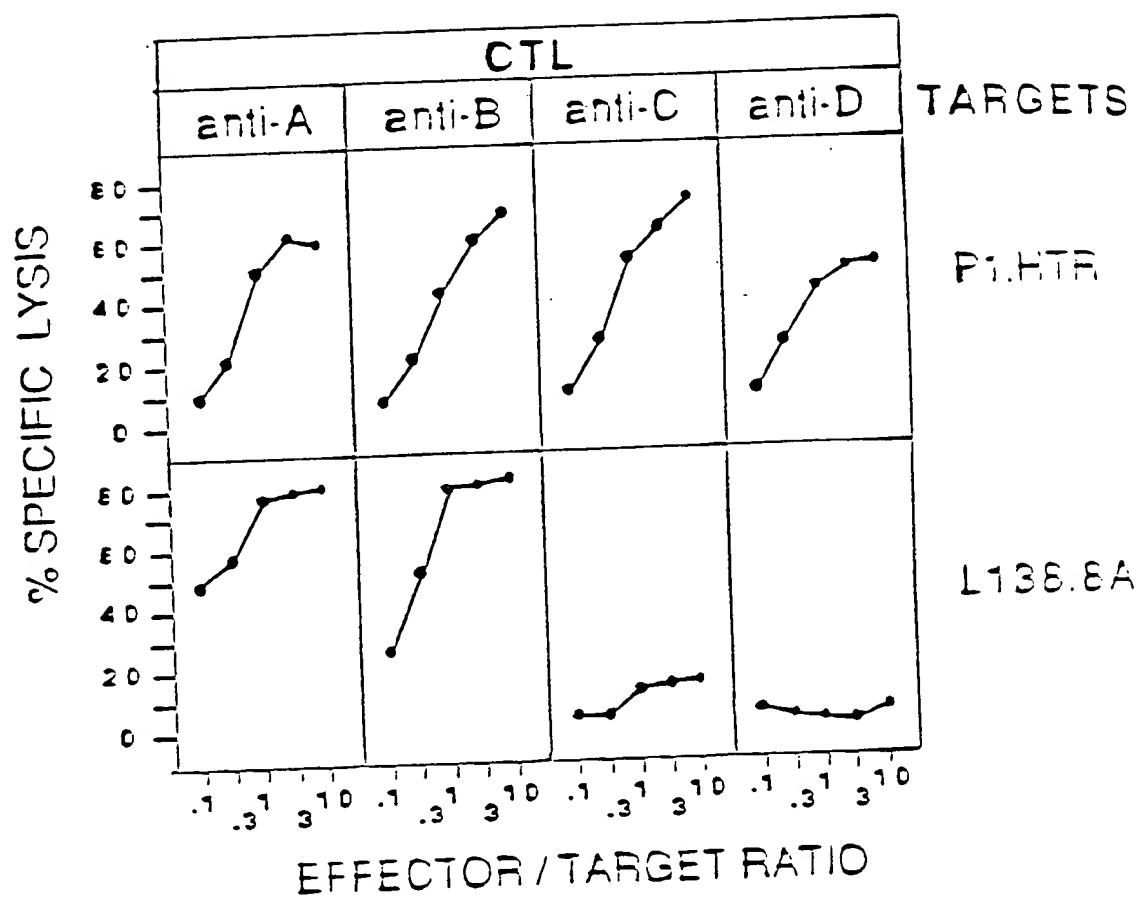


Figure 8





**Leu-Pro-Tyr-Leu-Gly-Trp-Leu**

**Figure 10**

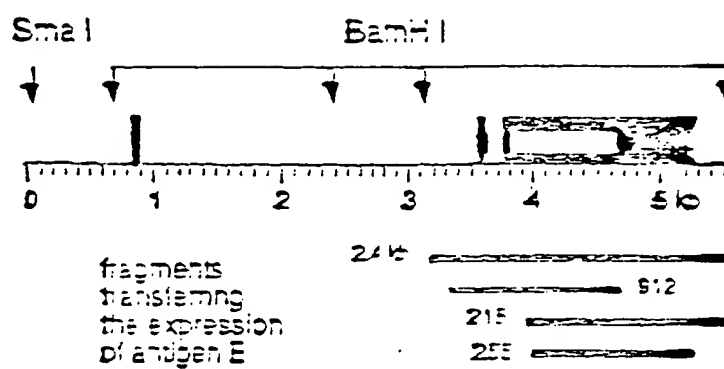


Figure 11

[illegible]



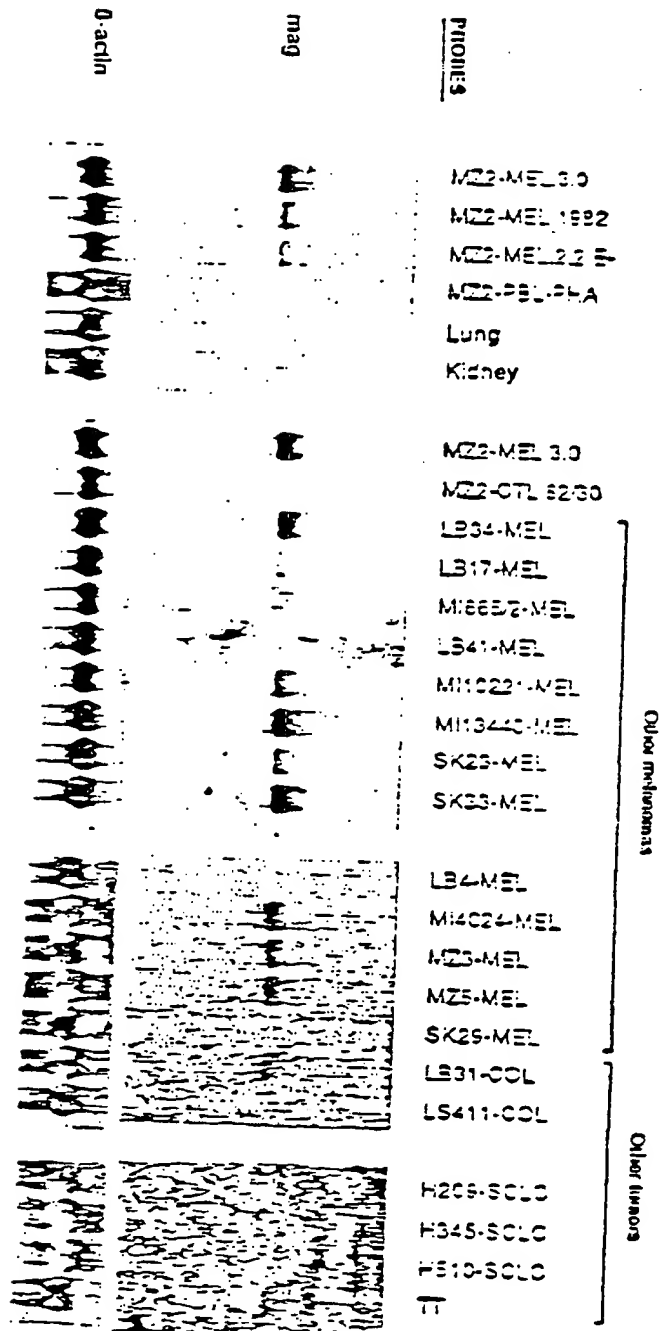


Figure 13

	EXPRESSION OF THE TNF FAMILY		REGULATION BY ALMT CTL		Expression of antigen M22 F after transfection
	Northern blot probed with cross-reactive mag-1 probe	cDNA PCR product probed with oligonucleotide specific for mag-1 mag-2 mag-3	tested by	TNF release	
Cells of patient M22	Melanoma cell line M22 MFL 3d	+	+	+	+
	tumor sample M22 (1027)	+	+	+	+
	antigen line variant M22-MEL 14	+	+	+	+
	CTL clone M22 CTL 0700	+	+	+	+
	MHA-activated blood lymphocytes	+	+	+	+
Normal tissues	Liver	+	+	+	+
	Muscle	+	+	+	+
	Skin	+	+	+	+
	Lung	+	+	+	+
	Brain	+	+	+	+
Melanoma cell lines of MHA-1 patients	IR34 MEL	+	+	+	+
	M105/2 MEL	+	+	+	+
	M10221 MEL	+	+	+	+
	M113443 MEL	+	+	+	+
	SK33 MEL	+	+	+	+
Melanoma cell lines of other patients	IR12 MEL	+	+	+	+
	IR13 MEL	+	+	+	+
	IR14 MEL	+	+	+	+
	M1074 MEL	+	+	+	+
	SK20 MEL	+	+	+	+
Melanoma tumor sample	M23 MEL	+	+	+	+
	M25 MEL	+	+	+	+
	M26 MEL	+	+	+	+
	M27 MEL	+	+	+	+
	M28 MEL	+	+	+	+
Other tumor cell lines	Small cell lung cancer H208	+	+	+	+
	Small cell lung cancer H245	+	+	+	+
	Small cell lung cancer H249	+	+	+	+
	Small cell lung cancer H250	+	+	+	+
	Small cell lung cancer H251	+	+	+	+
Other tumor samples	Brachial squamous cell carcinoma H257	+	+	+	+
	Epithelial squamous cell carcinoma H258	+	+	+	+
	Colon carcinoma H259	+	+	+	+
	Colon carcinoma H260	+	+	+	+
	Colon carcinoma H261	+	+	+	+

\* Data obtained in the conditions of Figure 4.

† Data obtained as described in Figure 4.

‡ Tumor release by CTL M22/30 after stimulation with the tumor cells as described in (2b).

§ Lyse of 51Cr labelled target by CTL M22/30 in the conditions of Figure 1.

|| Population of cells transfected with the 2.4 kb fragment of gene mag-1 were tested for their ability to stimulate TNF release by CTL.

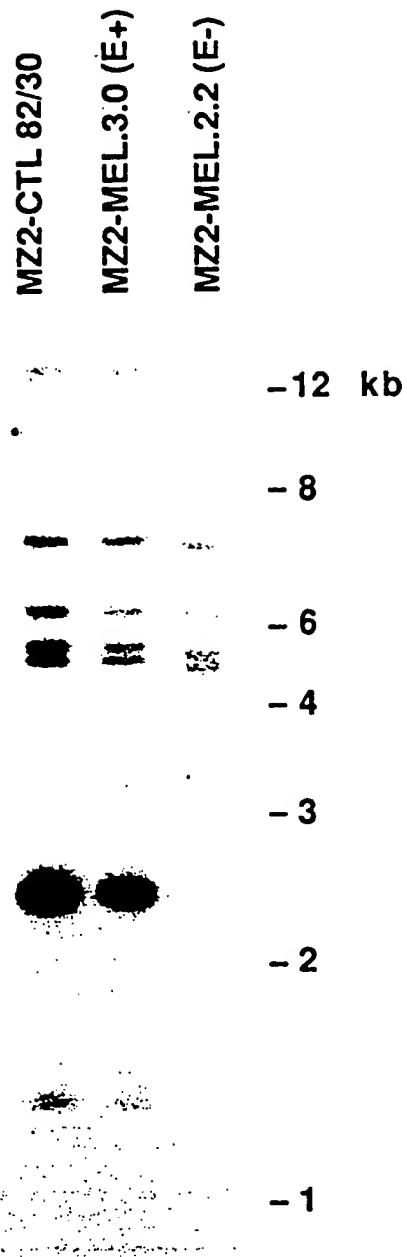


Figure 15



CCCGGGGCGC CACTGGGATC CCTCCCCCTA CCACCCGCAA TCCTCTCTTT  
TACGCCACCC ATCCAAACAT CTTCACGGTC ACCCCGAGCC CAAGCCAGGC  
AGAAATCCGT TCCACCCCTG CTCTCAACCC AGGGAAAGCC AGGTGCCAG  
ATGTAACGCC ACTGACTTGA GCATTAGTGG TTAGAGAGAA GCGAGGTATT  
CGGTCTGAGG GCGGGCTTGA GATCGGTGGA GGGAAAGCGG CCCAGCTCTG  
TAAGGAGGCA AGGTGACATG CTGAGGGAGG ACTGAGGACC CACTTACCCC  
AGATAGAGGA CCCCATAATA TCCCTTCATG CCAGTCTGG ACCATCTGGT  
GCTGGACTTC TCAGGCTGGG CCACCCGAG CCCCCTTGGT GCTTAAACCA  
CTGGGGACTC GAAGTCAGAG CTCCGTGTGA TCAGGGAAGG GCTGCTTAGG  
AGAGGGGAGC GTCCAGGCTC TGCCAGACAT CATGCTCAGG ATTCTCAGG  
AGGGCTGAGG GTCCCTAAGA CCCCAGTCC GTGATCCAA CCCCAGTCCA  
ATGCTCACTC CCGTACCCA ACCCCCTCTT CATTTCTATT CCAACCCCA  
CCCCACATCC CCCCACCCAT CCTCAACCC TGATGCCCAT CCGCCCAAGC  
ATTCCACCTT CACCCGAGC CCCCACCCCA CCCCAGTCC CACCCGAGC  
CAGGCAAGAT CCGCTTCCG CAGGAAACA TCCGGGTGCG CCGATGTGAC  
GCCACTGACT TCGGCAATGT GGGGAGAGA GAAGCGAGGT TTCCATTCTG  
AGGCAAGGCG TAGAGTTCG CCGAAGGAAC CTGACCCAGG CTCTGTGAGG  
AGGCAAGGTG AGAGGCTGAG GGAAGACTGA GGACCCGCG ACTTCAATA  
GAGAGCCCCA AATATTCAG CCCCCTCTT GCTGCCAGC CTGGCCGAGC  
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CCTTGAGAGA CACCAGGTTT TTCTCCCAA GCTCTGGAAT CAGAGGTTGC  
TGTGACGAG GCAGGACTGC TTAGGAGAGG GCAGGCGACA GCTCTGCGA  
GGCATCAGA TCAGTACCCA AGAGGGAGGG CTGTGGGGCC CCAAGACTGC  
ACTCCAAATC CCACTCCAC CCAATTGCA TTCCCATTC CCAACCAACC  
CCCATCTCT CAGGTACACC TCCACCCCA TCCCTACTCC TACTCCGTCA  
CGTGACCAAC ACCCTCCAG CCCCAGCCA GCCCCAACCC TTCTGCCACC  
TCACCCCTAC TGCCCCCAAC CCCCAGTCA TCTCTCTCAT GTGCCCACT  
CCCATCTCT CCCCATTCT GGCAGAAATC GGTCTGCCCC TCGTCTCAAC  
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ATCCACTGAG GGGAGTGT TTAGGCTCTG TGAGGAGGCA AGGTGAGATG  
CTGAGGGAGG ACTGAGGAGG CACACACCCC AGGTAGATGG CCCCCAAATG  
ATCCAGTACC ACCCTGCTG CCAAGCCCTG ACCACCCGCG CAGGACAGAT  
GTCTAGCTG GACCACTCC CCGTCCCTCC CACTGCCACT TAACCCAGC  
GGCAATCTGT AGTCATAGCT TATGTGACCG GGGCAGGGTT GGTCAAGAGA  
GGCAGGGCCC AGGCATCAAG GTCCAGATC CCCCCGCAAT TAGGCTCAGG  
ACCCTGGGAG GGAAGTGAAG GTTCCCCACC CACACCTGTC TCCTCATCTC  
CACCGCCACC CCACTCACAT TCCCATACCT ACCCTCTACC CCAACCTCA  
TCTTGTGAGA ATCCCTGCTG TCAACCCAGG GAAGCCACCG GAATGGCGGG  
CAGGCACTCG GATCTTGAC TCCCATCCA GGGTCTGAT GAGGGAAGGG  
GCTTGAACAG GGGCTCAGGG GAGCAAGAGG AGGGCCCTAC TGCGAGATGA  
GGGAGGCTC AGAGGACCCA GCACCTAGG ACACCCGACC CCGTCTGAG  
ACTGAGGCTG CCACTTCTGG CCTCAAGAT CAGAACGATG GGGACTCAGA  
TTGCAATGGG GTGGGACCCA GGCCTGCAAG GCTTACGGG AGGAAGAGGA  
GGGAGGACTC AGGGACCTT GGAATCCAGA TCAGTGTGGA CCGCGGCCCT  
GAGAGGTCCA GGGCAGCTG SCCCATATG GGCATATTE CCGCATCTT  
TGAGGTGACA GACACAGCT GTGGCTGAG AAGTGGGGCC TCAGGTCAAC  
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AGGACTGGGG ATATCCCGG CTCAGAAAGA AGGGACTCCA CACAGTCTGG  
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TTCCATTCTC ACTGTACCA CAGGACGAA GTTGGGGGGC CCGAGGAGG  
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AGGCTATGG AATCCACACC CCAGAACCA AGGGGTACG CCGGACAGC  
TCACCCAGGA TGTGGCTTCT TTTTCACTCC TGTTCAGGA TGTGGGCGAG  
GTGAGGACT CATCTCAGA GGTGACTCA GGTCAAGCTA GGGACCCCA  
TCTGGTCTAA AGACAGAGCG GTCCAGGAT CTCCATGCG TCGGGTGG  
GACATGAGG GAGGACTGAG GGTACCCGAG GACCAGACA CTGAGGAGGA  
CTGCACAGAA ATCAGCCCTG CCGCTGCTGT CACCCAGAG AGCATGGGT  
GGGCGGTCTG CCGAGGCTCT TCCGTATCC TGGGATCAT GATGTAGGG  
ACGGGGAGG CTGTGTGGA GAAGGCTGCG CTCAGGTGAG TAGAGGGAGC  
GTCCAGGCG CTGCCAGGAG TCAAGGTGAG GACCAAGCG GCACTCACCC  
CAGGACACAT TAATCCAAAT GAATTTGAT ATCTCTTGT GCGCTTCCCT  
AAGGACCTAG GCACGTGTGG CAGATGTTT GTCCCTCTCT GTCCCTCCAT  
TCTTATCAT GATGTGAAC TCTTGAATG GATTCTCAE ACCAGCAAA  
GGGCAAGGAT CAGGCGCTGC CAGGAAAAAT ATAGGGGCGG TCGGTAGAA  
CAGAGGGGGT CATCTACTGC ATGAGAGTGG GATGTGACA GATCCAGCC  
CACCTCTCT GTAGCACTGA GAAGCCAGGG CTGTGCTTGC GGTCTGACCC  
CTAGGGGCG GTGATTCCT CTTCCTGGA CTCCAGGAAC CAGGAGTGA  
GGCTTGTGTC TAGACAGTA TCTTCAGGT ACAGAGCASA GATGCACAG  
GTGTGCCAG CAGTGAATCT TTGCCCTGAA TGCACACCA GGGCCGAGC  
TGCCACAGGA CAGATAGGAC TCCACAGAT CTGGCTCAC CTCCCTACTG  
TCAGTCTGT AGATGAGC TCTGTGCGG GGTGTATCC TGAATACCT  
CTCACTCTCT CTTCAAGGT TTCAGGGAG AGGCCAACCC AGAGGACAGG  
ATCTCTTGA GGCACAGAG GAGCACCAG GAGAAGATCT GTAAGTAGGC  
CTTGTGAGA GTTCCAAAG TCAAGTCTC AGCTGAGGCG TCTCACACAC  
TCCCTCTCT CCGAGGCTG TGGGTCTCA TTGCCAGCT CCGCCGAGC  
CTCTGCTCT CTGCCCTGAG GAGATCATC  
ATG TCT CTG GAG CAG AGG AGT CTG CAC TGC AAG CTT GAG GAA

Figure 17a

GCC CTT GAG GCC CAA CAA GAG GCC CTG GGC CTG GTG TGT GTG  
CAG GCT GCC ACC TCC TCC TCC TCT CCT CTG GTC CTG GGC ACC  
CTG GAG GAG GTG CCC ACC GCT GGG TCA ACA GAT CCT CCC CAG  
AGT CCI CAG GGA GCC TCC GCC TTT CCC ACT ACC ATC AAC TTC  
ACI CGA CAG AGG CAA CCC AGT GAG GGT TCC AGC AGC CGT GAA  
GAG GAG GGG CCA AGC ACC TCT TGT ATC CTG GAG TCC TTG TTC  
CGA GCA GTA ATC ACT AAG AAG GTG GCT GAT TTS GTT GGT TTT  
CTG CTC CTC AAA TAT CGA GCC AGG GAG CCA GTC ACA AAG GCA  
GAA ATG CTG GAG AGT GTC ATC AAA AAT TAC AAG CAC TGT TTT  
CCT GAG ATC TTC GGC AAA GCC TCT GAG TCC ITS CAG CTG GTC  
TTT GGC ATT GAC GTG AAG GAA GCA GAC CCC ACC GGC CAC TCC  
TAT GTC CTT GTC ACC TGC CTA GGT CTC TCC TAT GAT GGC CTG  
CTG GGT GAT AAT CAG ATC ATG CCC AAG ACA GGC TTC CTG ATA  
ATT GTC CTG GTC ATG ATT GCA ATG GAG GGC GGC CAT GCT CCT  
GAG GAG GAA ATC TGG GAG GAG CTG AGT GTG ATG GAG GTG TAT  
GAT GGG AGG GAG CAC AGT GCC TAT GGG GAG CCC AGG AAG CTG  
CTC ACC CAA GAT TTG GTG CAG GAA AAG TAC CTG GAG TAC GGC  
AGG TGC CGG ACA GTG ATC CCG CAC GCT ATG AGT TCC TGT GGC  
GTC CAA GGC CCC TCG CTG AAA CCA GCT ATG TGA  
AAGICCTTG AGIATGTGAT CAAGGTCAGT GCAAGAGTTC  
GCTTTTCTT CCCATCCCTG CSICRAGCAG CTTTGAGAGA GGAGGAGAG  
GGAGTCTGAG CATGAGTTGC AGCCAAAGGCC AGTGGGAGG GAGCTGGGCC  
AGTGACACCTT CCAGGCCCCG GTCCAGCAGC TTCCCTGCCC TCSTGTGACA  
TGAGGCCCAT TCTTCACTCT GAAGAGAGCG GTCAAGTGTTC TCAGTAGTAG  
GTTCTGTTC TATTTGGTGA CTGGGAGATT TATCTTTGTI CTCITTTGGA  
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CAGTAAATA GATGAGATAA AGAATTAAG AATTAAGAG ATAOTCAATT  
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TAAAGLATIC TTCCIGTICA CTGGCTCTII TCTTCTCCAT GCACTGAGCA  
TCTGCTTTTT GGAAGGCCCT GGCTTAGTAG TGGAGATGCT AAGGTAAGCC  
AGACTCATAC CCATCCATAG GGTCTGAGAG TCTAGGAGCT GCAGTCACGT  
AATCGAGGTS GCAAGATGTC CTCIAAGAT GAAGGGAAAA GTGAGAGAGG  
GGTGAGGGTG TGGGGCTCCG GGTGAGAGTG GTGGAGTGTC AATGCCCTGA  
GCTGGGCTT TTTGGGCTTT GGGAAACTGC AGTTCCCTCT GGGGGAGCTG  
ATTGTAAATGA TCTTGGGTGATCC

Figure 17b

Gène **MAGE-**

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CCCATCCAGA TCCCCATCCG GGCAGAAATCC GGTTCACCCG TTGCCGTGAA
CCCAGGGGAG TCACGGGGCCG GGATGTGACG CCACGTGACTT GCAUATGGGA
GSTCAGAGGA CAGCGAGATT CTCGCCCTGA GCAACGGCCT GACGCGGGGG
GAGGGAAGCA GGGCGAGGCT CCGTGAGGAG GCAAGGTAAG ACGCCGAGGG
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CTTCAGGGTG ACAGAGACTT GAGGGCTGTG GTCTGAGGGC TGGGACTTCA
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AGTCTGGAAG TAAATGTTT TTAGCTCTGG GGGAACTCTA TCAGGGATGG
CCCTAAGTGA GAATCTCAT TGTACCACAG GCAGGAGGTT GGGGAACCTT
CAGGGAGATA AGGTCTTGGT GTAAAGAGGA GCTGTCTGCT CATTTGAGGG
GGTCCCCCTT TGAGAAAGGG CAGTCCCTGG CAGGASTAAA GATGAGTAAC
CCACAGGAGG CCATCATTAAC GTTACCCCTA GAACCAAAAG GGTGAGCCCT
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ATCCAGGTGG AGAGCCTGAG GTAGGATGGA GGGTACCCCT GGGCCAGAA
GCACCAAGGG GGGCCCATAG AATCTGCCCC TGCCCTGCG GTTACTTCAG
AGACCCCTGG CAGGGCTGTC AGGTGAAGTC CCTCCATTAT CTGGGATCTT
TGATGTCAAG GAAGGGGAGG CTTTGGTCTG AAGGGGCTGG AGTCAGGTCA
GTAGAGGGAG GTCTCAGGC CTTGCCAGGA GTGGACGTGA GGACCAAGGG
GACTCTGTC CAGGACACC TGGTCTCAA TGAATTGAC ATCTCTGGTT
GTCTTCCGG GAGGACCTGG TCACGTATGG CCAGATGTGG GTCCCTCTA
TCTCCTTCTG TACCATATCA GGGATGTGAG TTCTTGACAT CAGAGATTCT
CAAGCCAGCA AAGGGGTGGG ATTAGGCCCT ACAAGSAGAA AGGTGAGGGC
CCTGAGTGAG CACAGAGGGG ACCCTCCACC CAAGTAGAGT GGGGACCTCA
CGAGGTCTGG CCAACCCCTG TGAGACTCT GGAATCCGT GGTGTGCTT
GCAGTCTGCA CACTGAAGGC CCGTGCATTC CTCTCCAGG AATCAGGAGC
TCCAGGAACC AGGCACTGAG GCTTGGTCT GAGTCAGTGC CTCAGGTGAC
AGAGCAGAGG GGACCCAGAC AGTGCCACAA CTGAAGGTTT GCCTGGAATG
CACACCAAGG GCGCCACCCG CCCAGAACAA ATGSGACTCC AGAGGGCCCTG
GCTTACCCCT CCCTATTCTC AGTCTGTCAG CTTGAGCATG TGCTGGCCGG
CTGTACCCTG AGGTGCCCTC CCACTTCTCT CTCAGGTTT TGAGGGGGAC
AGGCTGATCA GTAGGACCCG AGGCACTGGA GGAGCATGTA AGGACAAGAT
CTGTAAAGTAA GCTTTGTGCA GAGCCTCCAA GGTTCAGTTC AGTTCTCACC
TAAGGCTCTA CACAGCTCC TTTCTCCCC AGGCTCTGGG GTCTTCATTG
CCCAGCTCTT GCGCCCACTC CTGCTGCTG CCTGACCAG AGTCATC
ATG CCT CTT GAG CAG AGG AGT CAG CAC TGC AAG CCT GAA GAA
GGC CTT GAG GCC CGA GGA GAG GGC CTG GGC CTG GTG GGT GCG
CAG SCT CCT GCT ACT GAG GAG CAG CAG ACC GCT TCT TCC TCT
TCT ACT CTA GTG GAA GTT ACC CTG GGG GAG GTG CCT GCT GCC
GAC TCA CCG AGT CCT CCC CAC AGT CCT CAG GGA GCC TCC AGC
TTC TCG ACT ACC ATC AAC TAC ACT CTT TGG AGA CAA TCC GAT
GAG GGC TCC AGC AAC CAA GAA GAG GAG GGG CCA AGA ATG TTT
CCC GAC CTG GAG TCC GAG TTC CAA GCA GCA ATC AGT AGG AAG
ATG GTT GAG TTG GTT CAT TTT CTG CTC CTC AAG TAT CGA GCC
AGG GAG CCG GTC ACA AAG GCA GAA ATG CTG GAG AGT GTC CTC
AGA AAT TGC CAG GAC TTC TTT CCC GTG ATC TTC AGC AAA GCC
TCC GAG TAC TTG CAG CTG GTC TTT GGC ATC GAG GTG GTG GAA
GTG GTC CCC ATC AGC CAC TTG TAC ATC CTT GTC ACC TGC CTG
GGC CTC TCC TAC GAT GGC CTG CTG GGC GAC AAT CAG GTC ATG
CCC AAG ACA GGC CTC CTG ATA ATC GTC CTG GCC ATA ATC GCA
ATA GAG GGC GAC TGT GCC CCT GAG GAG AAA ATC TGG GAG GAG
CTG AGT ATG TTG GAG GTG TTT GAG GGG AGG GAG GAC AGT GTC

```

Figure 18a

## Gène MAGE

TTC GCA CAT CCC AGG AAG CTG CTC ATG CAA GAT CTG GTG CAG  
 GAA AAC TAC CTG GAG TAC CGG CAG GTG CCC GGC AGT GAT CCT  
 GCA TGC TAC GAG TTC CTG TGG GGT CCA AGG GCC CTC ATT GAA  
 ACC AGC TAT GTG AAA GTC CTG CAC CAT ACA CTA AAG ATC GGT  
 GGA GAA CCT CAC ATT CCC TAC CCA CCC CTG CAT GAA CGG GCT  
 TTG AGA GAG GGA GAA GAG TGA  
 GTCTCAGCAC ATGTTGCAGC CAGGGCCAGT GGGAGGGGGT CTGGGGCCAGT  
 GCACCTTCCA GGGCCCCATC CATTAGCTTC CACTGGCTCG TGTGAATGA  
 GGCCCATTCG TGCCCTCTTG AAGAGAGCAG TCAGCATTCG TAGCAGTGAG  
 TTTCTGTTCT GTTGGATGAC TTGAGATTT ATCTTCTTT CCTGTTGGAA  
 TTGTTCAAAAT GTTCCTTTTA ACAAATGGTT GAATGAACIT CAGCATCCAA  
 GTTTATGAAT GACAGTAGTC ACACATAGTG CTGTTTATAT AGTTTAGGGG  
 TAAGAGTCCG GTTTTTTATT CAGATGGGA AATCCATTCG ATTTTGTGAG  
 TTGTCACATA ATAACAGCAG TCGAATATGT ATTTGCTAT ATTGTGAACG  
 AATTAGCAAT AAAATACATG ATACAAGGAA CTCAAAACAT AGTTAATCT  
 TGCCCTTATC CTCAGTCTAT TATGTAAAAT TAAAAATATG TGTATGTTTT  
 TGCTCTCTTG AGAATGCAAA AGAAATTAAA TCTGAATAAA TTCTTCCTGT  
 TCACTGGCTC ATTTCTTTAC CATTCACTCA GCATCTGCTC TGTGGAAGGC  
 CCGGGTAGTA GTGGG

Figure 18b



## Gène MAGE-21

GGATCCCCAT GGAATCCAGGA AGAATCCAGT TCCACCCCTG CTGTGAACCC  
AGGGAAATCA CGGGGCGGGA TGTGACGCCA CTGACTTGCG CGTTGGAGGT  
CAGAGAACAG CGAGATTCTC GCGCTGAGCA ACGGCTTGAC GTCGGCGGAG  
GGAAGCAGGC GCAGGCTCCG TGAGGAGGCA AGGTAAGATG CCGAGGGAGG  
ACTGAGGCGG GCCTCACCCC AGACAGAGGG CCCCCAATAA TCCAGCGCTG  
CCTCTGCTGC CAGGCTTGA CCACCTGCA GGGGAAGACT TCTCAGGCTC  
AGTCGCCACC ACCTCACCCC GCCACCCGCC GCGGCTTTAA CCGCAGGGA  
CTCTGGTGTA AGAGCTTTGT GTGACCAGGG CAGGGCTGGT TAGAAGTGCT  
CAGGGCCCAAG ACTCAGCCAG GAATCAAGGT CAGGACCCCA AGAGGGGACT  
GAGGGTAACC CCCCCGCACC CCCACACCA TTCCCATCCC CCAACACCA  
CCCCACCCC ATCCCCAAC ACCAAACCA CCACCATCGC TCAAACATCA  
ACGGCACCCC CAAACCCCGA TTCCCATCCC CACCCATCCC GGCAGAATCG  
SAGCTTTGCC CCTGCAATCA ACCCACGGAA GCTCCGGAAG TGGCGGCCAA  
GCACGCGGAT CC

## cDNA MAGE-3 (Fvdb)

Lysm2  
 Lysm1  
 Lysm3  
 47  
 1014  
 GCGCCGAGGG AAGCCGGCCC AAGCTCGGTG AGGAGCCAGG GTTCTGAGGG  
 GACAGGCTGA CCGGAGGAG CAGAGCCGCC GGCACCAACA CTCAGGAGAA  
 AGATCTGCCA GTGGGTCTCC ATTGCCAGGC TCTTGGCCAG ACTGCCGCCCT  
 GTTACCTTGA CCAGATCAT C  
 ATG CCG GTT GAG GAG AGC ACT GAG CAG TGC AAG CCG GAA GAA  
 GGC CTT GAG GCC CGA GAA GAG GCC CTG GGC CTG GTG GGT GCG  
 CAG CCG CCG CCG ACT GAG GAG CAG GAG GGT GCC TCC TCC TCT  
 TCT ACT GTA GTT GAA GTG AGC CTC GCG GAG GTG CCG CCG GCG  
 GAG TCA CCA GAT CCG CCG CAG AGT CCG CAG GGA GCG TCC AGC  
 CTC CCG ACT ACC ATG AAC TAC CCG CTC TCG AGC CAA TCC TAT  
 GAG GAG TCG AGC AAC GAA GAA GAG GAG GCG CCA AGC AGC TTC  
 CCG GAG CTG GAG TCC GAG TTC CAA GCA GCA CTC AGT AGG AAG  
 CTC GCG GAG TTC GTT CAT TTT CTG CTC CTC AAG TAT CCA GCC  
 AGG GAG CCG GTC ACA AAG GCA GAA ATG CTG GCG AGT GTC GTC  
 GGA AAT TGG CAG TAT TTC TTT CCG GTG ATC TTC AGC AAA GCT  
 TCG AGT TCG TCG CAG CTG GTC TTT GCG ATC GAG CAG ATC GAA  
 GTG GAG CCG ATC GCG CAG TTT TAC ATC TTT GCG ACC TCG CTG  
 GCG CTC TCC TAC GAT GCG CTG CTG GGT GAG AAT CAG ATC ATG  
 CCG AAC CCA CCG CTC CTG ATA ATC GTC CTG GCG ATA ATC GCA  
 AGA GAG GCG GAG TGT GCG CCG GAG GAG AAA ATC TCG GAG GAG  
 CTG AGT GTG TTA GAG GTG TTT GAG GCG AGG GAA GAG AGT ATG  
 TTT GCG GAT CCG AAG AAC CTC CTC AGC CAA CAT TTC CTC CAG  
 GAA AAC TAC CTG GAG TAC CCG CAG GTC CCG GCG AGT GAT CCG  
 GCA TGT TAT GAA TTC CTG TCG GGT CCA AGG GCG CTC GTT GAA  
 AGC AGC TAT GTC AAA GTC CTC CAG CAT ATC GTA AAG ATC AGT  
 GGA GGA CCG CAG ATT TCC TAC CCA CCG CTG CAT GAG TCG GTT  
 TTG ACA GAG GCG GAA GAG TCA  
 GTCTGAGCAG GAGTTGACAG CAGGAGCAGT GCGAGCGCGT CTCGCCCACT  
 GCGCCTTCCG GCGCGCCATC CATTAGTTTC CACTGCTTCC TTGACGCTGA  
 GCGCGATCTT TCACTCTTTC AAGCGAGCAG TCACCATCTT TACTAGTGGG  
 TTTGTTTCT GTTGGATGAC TTTGAGATTA TTTTGTCTT CTTTGTGGG  
 TTGTTCAAT GTTCTTTTA ACGGATGGT GAATGAGCGT CAGCATCCAG  
 CTTTATCAAT CACATATGTC ACACATAGTG CTGTTTATAT GTTTTGGAG  
 TAAGAGTCTT GTTTTTACT CAAATTGGGA AATCGATTCG ATTTTGTGAA  
 TTGTGACATA ATATAGCAG TGGTAAAGT ATTTGCTTAA AATTGTGAGC  
 GAATTACCAA TAACATACAT CACATAGCTC AAGAAATCAA AATATAGTTC  
 AATTTTGGT TGTACCTCAA TCTATCTGAT AATATAGC AATATAGCAA  
 ACCAGGATT CTTGACTTC TTTC

Figure 20

## Gène MAGE-31

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GGATCCTCCA CCCAGTAGA GTGGGGACCT CACAGAGCTT GGGCAACCTT
CCTGACAGTT CTGGGAATCC GTGGCTGCGT TTGCTGTCTG CACATTGGGG
GGCCGTGGAT TCCTCTCCCA GGAATCAGGA GCTCCAGGAA CAAGGCAATG
AGGACTTGST CTGAGGCAGT GTCTCAGGT CACAGAGTAG AGGGGGCTCA
GATAGTGCCA ACGGTAAGG TTGGCTTGG ATTCAAACCA AGGGCCCCAC
CTGCCCCAGA ACACATGGAC TCCAGAGCGC CTGSCCTCAC CCTCAATACT
TTCAGTCTCTG CAGCCTCAGC ATGGGCTGGC CGGATGTACC CTGAGGTGGC
CTCTCACTTC CTCCTTCAGG TTCTGAGGGG ACAGGCTGAC CTGGAGGACC
AGAGGCCCCC GGAGGAGCAU TGAAGGAGAA GATCTGTAAG TAAGCCTTTG
TTAGAGCCIC CAAGGTTCCA TTCAGTACTC AGCTGAGGTC TCTCACATGC
TCCCTCTCTC CCCAGGCCAG TGGGTCTCCA TTGCCAGCT CCTGCCACA
CTCCCCGCTG TTGCCCTGAC CAGAGTCATC
ATG CCT CTT GAG CAG AGG AGT CAG CAC TGC AAG CCT GAA GAA
GGC CTT GAG GCC CGA GGA GAG GCC CTG GGC CTG GTG GGT GCG
CAG GCT CCT GCT ACT GAG GAG CAG GAG GCT GCC TCC TCC TCT
TCT AGT GTA GTT GAA CTC ACC CTG GGG GAG GTG CCT GCT GCC
GAG TCA CCA GAT CCT CCC CAG AGT CCT CAG GGA GCC TCC AGC
CTC CCC ACT ACC ATG AAC TAC CCT CTC TGG AGC CAA TCC TAT
GAG GAC TCC AGC AAC CAA GAA GAG GAG GGC CCA AGC ACC TTC
CCT GAC CTG GAG TCT GAG TTC CAA GCA GCA CTC AGT AGG AAG
GTG GCC AAG TTG GTT CAT TTT CTG CTC

```

## cDNA MAGE-4

GGG CCA AGC ACC TCG CCT GAC GCA GAG TCC TTG TTC CGA GAA  
 GCA CTC AGT AAC AAG GTG GAT GAG TTG GCT CAT TTT CTG CTC  
 CGC AAG TAT CGA GCC AAG GAG CTG GTC ACH AAG GCA GAA ATG  
 CTG GAG AGA GTC ATC AAA AAT TAC AAG CGC TGC TTT CCT GTG  
 ATC TTC GGC AAA GCC TCC GAG TCC CTG AAG ATG ATC TTT GGC  
 ATT GAC GTG AAG GAA GTG GAC CCC GCC AGC AAC ACC TAC ACC  
 CTT GTC ACC TGC CTG GGC CTT TCC TAT GAT GGC CTG CTG GGT  
 AAT AAT CAG ATC TTT CCC AAG ACA GGC CTT CTG ATA ATC GTC  
 CTG GGC ACA ATT GCA ATG GAG GGC GAC AGC GCC TCT GAG GAG  
 GAA ATC TGG GAG GAG CTG GGT GTG ATG GGG GTG TAT GAT GGG  
 AGE GAG CAC ACT GTC TAT GGG GAG CCC AGG AAA CTG CTC ACC  
 CAA GAT TGG GTG CAG GAA AAC TAC CTG GAG TAC CGG CAG GTA  
 CCC GGC AGT AAT CCT GCG CGC TAT GAG TTC CTG TGG GGT CCA  
 AGG GCT CTG GCT GAA ACC AGC TAT GTG AAA GTC CTG GAG CAT  
 GTG GTC AGG GTC AAT GCA AGA GTT CCG ATT GCC TAC CCA TCC  
 CTG CSI GAA GCA GCT TTG TTA GAG GAG GAA GAG GCA GTC TGA  
 GCATGAGTTG CACCCAGGGC TGTGGGGAAG GGGCAGGGCT GGGCCAGTGC  
 ATCTAACAGC CCTGTGCAGC AGCCTCCCTT GCCTCGTGTA ACATGAGGCC  
 CATCTTCAC TCTGTTTGAA GAAAATAGTC AGTGITCITA GTAGTGGGT  
 TCTAIIITGT TGCATGACIT GCAGATTEAT CTCIGTTTCC TTTACAATG  
 TIGAAATGTT CTTTTAATG GATGGTGAAG ITAACTTCAG CATCCAASTT  
 TATGAATCCT AGTAAAGCTA TATGCTGCT AATATAGTTT AGGAGTAAGA  
 GTCTGTGTTT TTATTCAGAT TGGGCCCTCC GTTCTATTTT GTGAATTGG  
 GACATAATAA CAGCAGTCCA GTAAGTATTT AGAAGTGTGA ATTC

Figure 22

## Gène MAGE-5

GGATCCCCAG GAGGCCCTAG AGGAGCACCA AAGGAGAAGA TCTGTAAGTA  
AGCCTTTGET AGAGCCICCA AGGTCAGTT TTAGCTGAG GCTTCICACA  
TGCTCCCTCT CTCTCCAGGC CAGTGGGTCT CCATTGCCCA GCTCCTGCCC  
ACACTCCTGC CTGTTGCGGT GACCAGAGTC GTC  
ATG TCT CTT GAG CAG AAG AGT CAG CAC TGC AAG CCT GAG GAA  
GGC CTT GAC ACC CAA GAA GAG GCC CTG GGC TGG TGG CTG TGC  
AGG CTG CCA CTA CTG AGG AGC AGG AGG CTG TGT CCT CCT CCT  
CTC CTC TGG TCC AGG CAC CCT

## Gène MAGE-6

TAT TTC TTT CCT GIG ATC TTC AGC AAA GCT TCC GAT TCC TTG  
CAG CTG GTC TTT GGC ATC GAG CTG ATG GAA STG GAC CCC ATC  
GGC CAC GTG TAC ATC TTT GCC ACC TGC CTG GGC CTC TCC TAC  
GAT GGC CTG CEG GGT GAC AAT CAG ATC ATG CCC AGG ACA GGC  
TTC CTG ATA ATC ATC CTG GCC ATA ATC GCA ASA GAG GGC GAC  
TGT GCC CCT GAG GAG

ACA AGC ACT AGT TTC CTT GTG ATC TAT GGC AAA GCC TCA GAG  
TGC ATG CAG GTG ATG TTT GGC ATT GAC ATG AAG GAA GTG GAC  
CCC GCG GCC ACT CCT ACG TCT TGT ACC TGC TTG GGC CTC TCC  
TAC AAT GGC CTG CTG GGT GAT GAT CAG AGC ATG CCC GAG A